

Abstract

A system and method for locating regions of a target image having color information that matches, at least to a degree, the color information of a template image.

5 A color characterization method is described which operates to characterize the colors of an image. For each image pixel, the method determines a color category for the respective pixel based on HSI values of the respective pixel, wherein the color category is one of a plurality of possible color categories in HSI color space. The percentage of pixels assigned to each category is then determined. The percentage of pixels in each color category may

10 also be used as a quantitative measurement of the color distribution of the image. Once the color information of a template image has been characterized, a target image may be searched in order to locate regions within the target image having matching color information. In one embodiment, a coarse-to-fine heuristic may be utilized, in which multiple passes of decreasing granularity are performed. A first-pass search may operate to

15 identify a list of candidate match regions. These candidate match regions may then be examined in further detail in order to determine final matches.

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